

Clinical Update

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Managing child behaviors in the dental setting

LT Randy G. Reese, MSC, USNR, and Commander Margaret Alexander, DC, USN

Introduction

A study done in 1990 found that 15% to 20% of children in a private dental practice were disruptive(1). Despite claims that "dentistry related fears are not as much of an issue anymore for most American children,"(2) dentists who work with children will certainly encounter disruptive behavior in one form or another. Disruptive behavior can interfere with treatment, increase stress of the dental operator and staff, and disturb other patients. Though much has been written on managing child behaviors in a dental setting, Wilson found only 35 controlled studies investigating different methods over the past three decades. This update will provide a summary and synthesis of the current literature regarding this subject. First, different types of disruptive behavior will be discussed. Next, preventative measures will be outlined. Finally, a range of interventions including parental presence in the operatory, communicative, behavioral, physical, and empathic strategies will be presented.

Disruptive behaviors

Disruptive behaviors can be described in one of four categories: resistant, anxious/fearful, shy, or out of control. Resistant behaviors are those that are uncooperative, but not out of fear. An anxious or fearful child may also be resistant, but the actions are motivated by the anxiety. A shy child may also be resistant, but the behavior is based on an interpersonal, social discomfort. Out of control behaviors are perhaps the most disruptive, and may pose the biggest challenge to the operator. Understanding the type of disruptive behavior will influence the intervention selected to work with the child. Pinkham advocates a systematic method of gathering information, analyzing the data, and testing a strategy. This will help the operator predict behavior and develop a behavioral management strategy (3).

Pre-appointment Preparation

Research from psychology reveals that a method referred to as "errorless learning" is an effective way of developing desired behaviors. In this approach, the subject is guided through the target task without the possibility of error. By doing this, the subject learns only the correct way to perform the task. In the dental setting, this translates to setting the stage for the pediatric dental patient to exhibit only desired behaviors from the beginning. Several steps can be taken to ensure this result. To this end, pre-appointment preparation can be significant. An initial letter or phone call can help establish the child's and parent's previous experience with and attitudes toward dental care. It can also help to establish a rapport with the parent. Parental reactions influence the child's behavior, so setting the parent at ease can be a significant factor in reducing behavior problems in the child.

Prior to the actual visit, an acquaintance visit can help familiarize the future child patient to the dental environment. The Tell-Show-Do (TSD) method is advocated as a strategy to familiarize children with the dental environment. The staff describes the procedure, and then demonstrates. This is called modeling, in which the child observes another person experiencing the procedure just described.

This can be done in vivo, or by video. (See Clinical Update, Nov 2001, "A learning-based approach to preventing dental phobias" (http://nnd40.med.navy.mil/ndsbethesda/01November.htm).

It is important to consider all sensory aspects of the child's experience in the acquaintance visit and TSD training. Describe the *proprioceptive* sense of leaning back, and a possible sensation of falling. Describe *visual* sensations, detailing all things the child may see. Familiarize the child with *auditory* sensations, including the sound of dental equipment. Many agents also have distinct *tastes/smells* with which the child should be acquainted. The child should also be familiarized with things that will be sensed by *touch* such as a rubber dam, gloved hands on the face, and anything that may touch their body during the procedure (4).

Parental Presence

After the child has been familiarized with the upcoming experience, the operator must decide whether or not to allow the parent into the operatory. Many recent surveys reveal that most parents (70%-85%) prefer to be in the operatory with their child, and that nearly all of these believe that their child will be more cooperative with parental presence. Reasons given by dentists for disallowing parents in the operatory range from divided attention (5,6) and interference with rapport (6) to discomfort with managing the child's behavior in the parent's presence.

A brief discussion of attachment may prove useful. Developmental psychology has identified a normal progression of anxiety in children in which a child will exhibit signs of anxiety or distress if separated from the primary caregiver. This normal attachment lasts until about three years of age, and is referred to as developmental separation anxiety. This is differentiated from separation anxiety disorder, in which signs of anxiety or distress are evident during separation from the primary attachment figure. This distress is beyond what is expected for the child's developmental level. Some warning signs of possible problems with separation anxiety disorder are 1) no pre-operative familiarization tour, 2) previous surgery, and 3) a dependent or withdrawn disposition (5). An appropriate assessment of the child's developmental level in regards to attachment can help the dentist make a decision regarding parental presence. If the parent is permitted in the operatory, it is important to educate the parent regarding the procedure, expectations, and role.

Behavioral Management Strategies

The American Academy of Pediatric Dentistry published Guidelines for Behavioral Management listing ten specific management techniques (7). These are divided into basic and advanced management techniques. Basic techniques include five communication strategies - voice control, nonverbal communication, tell-show-do, positive reinforcement, and distraction - parental presence/absence, and nitrous oxide/oxygen inhalation sedation. Advanced techniques include hand-over-mouth exercise (HOME), medical immobilization, and sedation (Pharmacological interventions will not be discussed in this update.)

Voice control involves raising or lowering the voice to get the child's attention. Nonverbal communication can be expression (more difficult with today's personal protective equipment) and gestures. Surveys have found that a relative large number of dentists use communication strategies, as well as HOME and restraints. However, surveys of parents' attitudes have found that most parents are opposed to physical interventions like HOME and restraints, as well as to voice control (8). It was found that parents are more accepting of techniques if they are described beforehand, with a rationale for their use. Thus, it is important to obtain parental informed consent prior to beginning the procedure.

Positive reinforcement is providing a desirable response after target behavior is performed. This can range from a simple verbal acknowledgement to a small gift at the end of a visit. Literature has shown that positive reinforcement results in better learning than punishment, in which an aversive response is applied following undesired behavior. HOME or raising one's voice may be seen as punishment because they are aversive response to undesirable behavior. Positive reinforcement can be used to shape behavior by verbally reinforcing even the smallest part of desired behavior (4). By reinforcing desired behavior, even partial behavior, the child's behavior is "shaped" over time into the complete desired behavior, without the application of an aversive response, which may induce fear, discomfort, or anxiety.

Distraction involves refocusing the child's attention from the procedure at hand to some more innocuous stimulus. This can be done through conversation, or some offices use a small monitor for the child to watch a video. This should not be used in lieu of preparatory and other positive strategies, but as a technique to help minimize anxiety in cooperative children.

Communication

Adults sometimes have a tendency to "talk down" to children, changing the tone, pitch, or rate of their speech. This should be avoided with children in the dental setting. Operators should be honest, flexible, and use vocabulary that is appropriate for the age of the patient. They should also use eye contact, set clear expectations, and help to establish confidence (9).

As with behavioral interventions, operators will most likely have better experiences with positive rather than negative methods. Accordingly, more desirable outcomes will be achieved when the dentist avoids negatives such as "Stop," and "Don't do…" Also, it is important to avoid shaming: "Most children your age can…why can't you? (4)"

Roberts asserts the importance of empathy in addition to technique (10). He says that child behavior problems stem from their perception of dentistry. Children choose to behave in order to influence their environment, as is clearly seen in infants who have different cries indicating hunger, loneliness, or needing to be changed.

Therefore, rather than focusing on correcting behavior only, operators can work to change the child's perception. This requires good communication skills with a willingness to listen for feedback (9) and use empathy.

The empathic provider seeks to understand and acknowledge the child's experience. By so doing, inaccurate perceptions can be identified and corrected, thereby preventing or reducing undesirable behaviors

Behavioral health

So, what about those children who do not respond to the above measures? Some children may need more detailed systematic desensitization intervention to reduce anxiety reactions. Children with out of control behavior who do not respond to the above techniques may require multidisciplinary intervention. A trained psychologist can provide treatment or consultation on difficult cases. Multidisciplinary approaches are increasingly used in medical and dental arenas to optimize patient response to interventions.

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Lieutenant Reese is Chair, Behavioral Healthcare and Captain (sel) Alexander is Chair, Pediatric Dentistry at the Naval Postgraduate Dental School.

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